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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,850	07/18/2003	Willard Charles Raymond	A126.116.102	4768
25281	7590	03/30/2006	EXAMINER	
DICKE, BILLIG & CZAJA, P.L.L.C. FIFTH STREET TOWERS 100 SOUTH FIFTH STREET, SUITE 2250 MINNEAPOLIS, MN 55402			KEENAN, JAMES W	
			ART UNIT	PAPER NUMBER
			3652	

DATE MAILED: 03/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/622,850

Applicant(s)

RAYMOND, WILLARD CHARLES

Examiner

James Keenan

Art Unit

3652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Art Unit: 3652

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3-7, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Fuke et al (US 6,062,795).

Fuke shows a wafer ring feeding apparatus (a wafer ring being considered structurally equivalent to a “film frame”, in that it comprises a wafer sheet or film 2 surrounded by a ring or frame 1), comprising cassette 10 loaded on an elevator 13 (considered to be a “load port”, absent any further limitations), robot end effector 58 for grabbing a selected film frame from the cassette or returning a film frame to the cassette, and a vertically adjustable frame support 80 including horizontally adjustable contact elements 86 which help guide the film frames in or out of the cassette. Since the frame support has at least some vertical adjustability, it is considered “adapted to be vertically adjustable relative to the cassette ... for selective alignment with each of the slots”, even though it is the cassette which moves vertically to accomplish this function, since relative vertical movement between these elements is all that the claim requires.

Re claims 3-7, the frame support includes base arm 81, opposing support arms 85A, 85B each containing plural contact elements 86a, 86A, and 86b, 86B, respectively, and actuators 87, 88 (also note col. 8, lines 6-15) for horizontally moving the contact elements relative to the base arm.

Re claim 18, the contact elements are considered to be "vertically compliant", as broadly claimed, by virtue of their connection to air cylinder 92.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2, 8, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fuke et al.

Fuke does not show the frame support to be Y-shaped or the contact elements to comprise spring-loaded rollers.

Nevertheless, it would have been obvious for one of ordinary skill in the art at the time of the invention to have modified the apparatus and method of Fuke to include these features, as they are simply design expediciencies which would neither require undue experimentation nor produce unexpected results, as applicant has not disclosed they solve any particular problem and it appears the invention would work equally well.

5. Claims 1-10 and 14-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fuke et al in view of Nakamura (US 6,236,904, previously of record).

Although claims 1-9 and 18 are considered unpatentable over Fuke et al alone, as noted above, this rejection applies to these claims to strengthen the examiner's

position in the event applicant persuasively argues and/or amends these claims to overcome that rejection.

Re claim 10, Fuke et al does not show moving the frame support linearly vertically relative to the cassette in the manner set forth. Rather, as noted by applicant, the cassette moves on an elevator relative to the frame support.

Nakamura shows a similar system for conveying flat circular articles in and out of cassettes, wherein one embodiment (figures 1-3) shows the cassette 8 mounted on a vertically movable support 7 relative to a vertically stationary robot end effector 2, but in figures 4-5, shows another embodiment in which the cassette is stationary while the robot is vertically movable.

It would have been obvious for one of ordinary skill in the art at the time of the invention to have modified Fuke et al such that the frame support (and robot end effector) was vertically movable relative to a stationary cassette, rather than vice-versa, as Nakamura explicitly discloses this as an alternative equivalent means of performing the same function in the same environment, the use of either of which would work equally well in performing the claimed method.

6. Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fuke et al in view of Nakamura, as applied to claim 10 above, and further in view of Aoki et al (US 5,520,276).

Although Fuke as modified shows the ability to horizontally position the contact elements, this is not done based on the determined diameters of different sized film frames.

Aoki shows that it is well known to horizontally adjust guide rails in response to the determined width of different sizes of lead frames.

It would have been obvious for one of ordinary skill in the art at the time of the invention to have further modified the method of Fuke such that the size (diameter) of film frames in the cassette could be determined and the distance between the contact elements adjusted correspondingly thereto, as taught by Aoki, as this would enable the method to be easily performed on film frames of differing sizes and thus provide increased usefulness and flexibility of the system.

7. Applicant's arguments filed 1/25/06 have been fully considered but they are not persuasive.

Although applicant argues that Fuke et al show moving the cassette vertically relative to the end effector, instead of the other way around, nothing in the language of claim 1 precludes this, as noted above.

8. Applicant's arguments with respect to claims 10-17 and 19-20 have been considered but are moot in view of the new ground(s) of rejection.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Keenan whose telephone number is 571-272-6925. The examiner can normally be reached on (schedule varies).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eillen Lillis can be reached on 571-272-6928. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3652

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "James Keenan". The signature is fluid and cursive, with the first name "James" and last name "Keenan" clearly distinguishable.

James Keenan
Primary Examiner
Art Unit 3652

jwk
3/28/06